WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Monday, June 21, 2004

Hide?	Set Name	Query	Hit Count
		DB=USPT; PLUR=YES; OP=AND	
☐	L1	5747293.pn.	1
		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=AND	
☐	L2	(intimin or eae or antiintimin or anti-intimin or intiminlike or intimin-like or ipa or antiipa or anti-ipa or invasin or invasinlike or invasin-like).clm.	311
☐	L3	L2 and (method or process or treat$).clm.	278
☐	L4	L3 and (passive$ or immunother$ or immunotrans$ or $immunity or ivig or igiv or iggiv or igg-iv or iv-igg).clm.	1
☐	L5	L2 and (passive near5 transfer).ti,ab,clm.	0
☐	L6	L2 and (immunother$).ti,ab,clm.	1
☐	L7	(intimin or eae or antiintimin or anti-intimin or intiminlike or intimin-like or ipa or antiipa or anti-ipa or invasin or invasinlike or invasin-like)	20571
☐	L8	L7 and (passive$ or immunother$ or immunotrans$ or $immunity or ivig or igiv or iggiv or igg-iv or iv-igg)	1697
☐	L9	L7 same (passive$ or immunother$ or immunotrans$ or $immunity or ivig or igiv or iggiv or igg-iv or iv-igg)	345
☐	L10	L7 same (passive$ or immunother$ or immunotrans$ or ivig or igiv or iggiv or igg-iv or iv-igg)	165
☐	L11	l10 and (ehec or epec or coli or shigella or yersinia or campylobacter or (attaching near3 effacing))	45
☐	L12	anti-intimin.clm.	1
☐	L13	anti-invasin.clm.	1
☐	L14	anti-ipa.clm.	0
☐	L15	anti-ipaa.clm.	0
☐	L16	anti-ipab.clm.	0
☐	L17	antiipab.clm.	0
☐	L18	antiipa.clm.	0
☐	L19	antieae	0
☐	L20	anti-eae	6

END OF SEARCH HISTORY

Generate Collection | Print

Search Results - Record(s) 1 through 6 of 6 returned.

1. 20040086513. 12 Nov 03. 06 May 04. Antibodies for preventing and treating attaching and effacing escherichia coli (aeec) associated diseases. Fairbrother, John M., et al. 424/169.1; 530/388.4 800/6 A61K039/40 C07K016/12.

2. 20030166556. 30 Sep 02. 04 Sep 03. Immunoregulator. Khan, Nisar Ahmed, et al. 514/12; A61K038/24.

3. 20030147902. 20 May 02. 07 Aug 03. Method of stimulating and immune response by administration of host organisms that express intimin alone of as a fusion protein with one of more other antigens. Stewart, C. Neal JR., et al. 424/185.1; A61K039/00.

4. 20020006407. 18 Apr 97. 17 Jan 02. HISTIDINE-TAGGED INTIMIN AND METHODS OF USING INTIMIN TO STIMULATE AN IMMUNE RESPONSE AND AS AN ANTIGEN CARRIER WITH TARGETING CAPABILITY. MCKEE, MARIAN L., et al. 424/184.1; A61K039/00 A61K039/38 A61K039/02.

5. 6406885. 26 Oct 00; 18 Jun 02. Plants and plant cells expressing histidine tagged intimin. Stewart, Jr.; C. Neal, et al. 435/69.1; 435/410 435/420 435/69.3 536/23.1 536/23.2 536/23.7. C12P021/06.

6. 6261561. 18 Apr 97; 17 Jul 01. Method of stimulating an immune response by administration of host organisms that express intimin alone or as a fusion protein with one or more other antigens. Stewart, Jr.; C. Neal, et al. 424/184.1; 424/234.1 435/252.3 435/469 435/470 435/6 435/69.1 536/23.71 800/288. A61K039/395.

Generate Collection | Print

Terms	Documents
anti-eae	6

Prev Page Next Page Go to Doc#

```
?e intimin

Ref    Items  Index-term
E1       151  INTIMIDATION
E2         1  INTIMIDATORS
E3       314 *INTIMIN
E4         1  INTIMINO127
E5         2  INTIMINO157
E6        19  INTIMINS
E7         2  INTIMITAT
E8        11  INTIMITE
E9         3  INTIMITEIT
E10        1  INTIMITET
E11        3  INTIMITIS
E12        2  INTIMIZATION

          Enter P or PAGE for more
?s e3-e6
               314  INTIMIN
                 1  INTIMINO127
                 2  INTIMINO157
                19  INTIMINS
      S1       316  E3-E6
?e invasin

Ref    Items  Index-term
E1         2  INVASIIVISEN
E2         1  INVASIIVISIA
E3       253 *INVASIN
E4         1  INVASINE
E5         3  INVASINESS
E6         6  INVASING
E7        61  INVASINS
E8         2  INVASIO
E9         1  INVASIOLOGY
E10    40878  INVASION
E11        4  INVASION PROTEIN B, SALMONELLA TYPHIMURIUM
E12        1  INVASION PROTEIN, RHIZOBIUM LOTI

          Enter P or PAGE for more
?p

Ref    Items  Index-term
E13       12  INVASIONAL
E14        1  INVASIONAND
E15        3  INVASIONARY
E16       31  INVASIONE
E17        4  INVASIONEN
E18        5  INVASIONES
E19        1  INVASIONESS
E20        1  INVASIONFAHIGER
E21      574  INVASIONS
E22        1  INVASIONSEIGENSCHAFTEN
E23        1  INVASIONSFAHIGEN
E24        2  INVASIONSFAHIGER

          Enter P or PAGE for more
?s e3 or e11 or e12
               253  INVASIN
                 4  INVASION PROTEIN B, SALMONELLA TYPHIMURIUM
                 1  INVASION PROTEIN, RHIZOBIUM LOTI
      S2       258  'INVASIN' OR 'INVASION PROTEIN B, SALMONELLA TYPHIMURIUM'
                    OR 'INVASION PROTEIN, RHIZOBIUM LOTI'
?e attaching and effacing

Ref    Items  Index-term
E1         4  ATTACHI
E2      2347  ATTACHING
E3         0 *ATTACHING AND EFFACING
```

```
E4         1  ATTACHINGS
E5         1  ATTACHMENI
E6         1  ATTACHMENOV
E7     44935  ATTACHMENT
E8      1610  ATTACHMENT //DENTURE PRECISION (DENTURE PRECISION ATTACHMENT)
E9      1150  ATTACHMENT //EPITHELIAL (EPITHELIAL ATTACHMENT)
E10     6227  ATTACHMENT //OBJECT (OBJECT ATTACHMENT)
E11       66  ATTACHMENT DISORDER //REACTIVE (REACTIVE ATTACHMENT DISORDER)
E12     1219  ATTACHMENT LOSS //PERIODONTAL (PERIODONTAL ATTACHMENT LOSS)

          Enter P or PAGE for more
?p

Ref    Items   RT  Index-term
E13        0    1  ATTACHMENT LOSS, PERIODONTAL
E14      335       ATTACHMENT PROTEIN G
E15       11       ATTACHMENT PROTEIN H
E16       64       ATTACHMENT   REGION  BINDING  PROTEINS  //MATRIX  (MATRIX
                   ATTACHMENT REGION BINDING PROTEINS)
E17       10       ATTACHMENT REGIONS //MATRIX (MATRIX ATTACHMENT REGIONS)
E18      354    6  ATTACHMENT SITES (MICROBIOLOGY)
E19       10       ATTACHMENT SITES (MICROBIOLOGY) --DRUG EFFECTS
E20      135       ATTACHMENT SITES (MICROBIOLOGY) --GENETICS --G
E21        2       ATTACHMENT SITES (MICROBIOLOGY) --IMMUNOLOGY -
E22        8       ATTACHMENT SITES (MICROBIOLOGY) --PHYSIOLOGY -
E23        1       ATTACHMENTANDERUNGEN
E24        1       ATTACHMENTHOHE

          Enter P or PAGE for more
?s attach? (2n) effac?
           87797  ATTACH?
            1321  EFFAC?
      S3     437  ATTACH? (2N) EFFAC?
?ds

Set     Items   Description
S1        316   E3-E6
S2        258   'INVASIN' OR 'INVASION PROTEIN B, SALMONELLA TYPHIMURIUM' -
              OR 'INVASION PROTEIN, RHIZOBIUM LOTI'
S3        437   ATTACH? (2N) EFFAC?
?e eae

Ref    Items  Index-term
E1         1  EAD61
E2         1  EAD800
E3      3694 *EAE
E4       281  EAE PROTEIN
E5       185  EAEA
E6         1  EAEAEA
E7         1  EAEAEAK
E8         1  EAEALPHA
E9         1  EAEAM
E10        1  EAEAO157
E11        1  EAEAYEAIE
E12        1  EAEAYV

          Enter P or PAGE for more
?s e3 or e4
             3694  EAE
              281  EAE PROTEIN
      S4     3694  'EAE' OR 'EAE PROTEIN'
?s e10
      S5        1  'EAEAO157'
?s e8
      S6        1  'EAEALPHA'
?ds

Set     Items   Description
S1        316   E3-E6
```

```
S2          258   'INVASIN' OR 'INVASION PROTEIN B, SALMONELLA TYPHIMURIUM' -
                     OR 'INVASION PROTEIN, RHIZOBIUM LOTI'
S3          437   ATTACH? (2N) EFFAC?
S4         3694   'EAE' OR 'EAE PROTEIN'
S5            1   'EAEAO157'
S6            1   'EAEALPHA'
?e immunotherap

Ref    Items  Index-term
E1        18  IMMUNOTHER
E2         1  IMMUNOTHERA
E3         1 *IMMUNOTHERAP
E4         1  IMMUNOTHERAPE
E5         1  IMMUNOTHERAPEAUTICAL
E6         1  IMMUNOTHERAPEI
E7         1  IMMUNOTHERAPETIC
E8         1  IMMUNOTHERAPEUFTC
E9         1  IMMUNOTHERAPEUSIS
E10        1  IMMUNOTHERAPEUTI
E11     2386  IMMUNOTHERAPEUTIC
E12       60  IMMUNOTHERAPEUTICAL

          Enter P or PAGE for more
?p

Ref    Items  Index-term
E13       18  IMMUNOTHERAPEUTICALLY
E14      121  IMMUNOTHERAPEUTICS
E15        1  IMMUNOTHERAPEUTIES
E16        1  IMMUNOTHERAPEUTISCHE
E17        1  IMMUNOTHERAPEUTISCHER
E18        8  IMMUNOTHERAPHY
E19        2  IMMUNOTHERAPIC
E20        1  IMMUNOTHERAPICS
E21      305  IMMUNOTHERAPIE
E22      680  IMMUNOTHERAPIES
E23        1  IMMUNOTHERAPIIA
E24        3  IMMUNOTHERAPIQUE

          Enter P or PAGE for more
?p

Ref    Items   RT  Index-term
E25        1       IMMUNOTHERAPIQUES
E26        4       IMMUNOTHERAPIST
E27        4       IMMUNOTHERAPISTS
E28        1       IMMUNOTHERAPUETIC
E29        1       IMMUNOTHERAPUTIC
E30    32061   19  IMMUNOTHERAPY
E31      506       IMMUNOTHERAPY --ADVERSE EFFECTS --AE
E32        6       IMMUNOTHERAPY --CLASSIFICATION --CL
E33       14       IMMUNOTHERAPY --CONTRAINDICATIONS --CT
E34       35       IMMUNOTHERAPY --ECONOMICS --EC
E35       71       IMMUNOTHERAPY --HISTORY --HI
E36        6       IMMUNOTHERAPY --INSTRUMENTATION --IS

          Enter P or PAGE for more
?p

Ref    Items   RT  Index-term
E37        9       IMMUNOTHERAPY --LEGISLATION AND JURISPRUDENCE
E38     3316       IMMUNOTHERAPY --METHODS --MT
E39        7       IMMUNOTHERAPY --MORTALITY --MO
E40       11       IMMUNOTHERAPY --NURSING --NU
E41        5       IMMUNOTHERAPY --PSYCHOLOGY --PX
E42       68       IMMUNOTHERAPY --STANDARDS --ST
E43       16       IMMUNOTHERAPY --STATISTICS AND NUMERICAL DATA
E44        1       IMMUNOTHERAPY --SUPPLY AND DISTRIBUTION --SD
E45      285       IMMUNOTHERAPY --TRENDS --TD
```

```
E46      12       IMMUNOTHERAPY --UTILIZATION --UT
E47      92       IMMUNOTHERAPY --VETERINARY --VE
E48    1036     6  IMMUNOTHERAPY, ACTIVE

          Enter P or PAGE for more
?s e1-e47
               18  IMMUNOTHER
                1  IMMUNOTHERA
                1  IMMUNOTHERAP
                1  IMMUNOTHERAPE
                1  IMMUNOTHERAPEAUTICAL
                1  IMMUNOTHERAPEI
                1  IMMUNOTHERAPETIC
                1  IMMUNOTHERAPEUFTC
                1  IMMUNOTHERAPEUSIS
                1  IMMUNOTHERAPEUTI
             2386  IMMUNOTHERAPEUTIC
               60  IMMUNOTHERAPEUTICAL
               18  IMMUNOTHERAPEUTICALLY
              121  IMMUNOTHERAPEUTICS
                1  IMMUNOTHERAPEUTIES
                1  IMMUNOTHERAPEUTISCHE
                1  IMMUNOTHERAPEUTISCHER
                8  IMMUNOTHERAPHY
                2  IMMUNOTHERAPIC
                1  IMMUNOTHERAPICS
              305  IMMUNOTHERAPIE
              680  IMMUNOTHERAPIES
                1  IMMUNOTHERAPIIA
                3  IMMUNOTHERAPIQUE
                1  IMMUNOTHERAPIQUES
                4  IMMUNOTHERAPIST
                4  IMMUNOTHERAPISTS
                1  IMMUNOTHERAPUETIC
                1  IMMUNOTHERAPUTIC
            32061  IMMUNOTHERAPY
              506  IMMUNOTHERAPY --ADVERSE EFFECTS --AE
                6  IMMUNOTHERAPY --CLASSIFICATION --CL
               14  IMMUNOTHERAPY --CONTRAINDICATIONS --CT
               35  IMMUNOTHERAPY --ECONOMICS --EC
               71  IMMUNOTHERAPY --HISTORY --HI
                6  IMMUNOTHERAPY --INSTRUMENTATION --IS
                9  IMMUNOTHERAPY --LEGISLATION AND JURISPRUDENCE
             3316  IMMUNOTHERAPY --METHODS --MT
                7  IMMUNOTHERAPY --MORTALITY --MO
               11  IMMUNOTHERAPY --NURSING --NU
                5  IMMUNOTHERAPY --PSYCHOLOGY --PX
               68  IMMUNOTHERAPY --STANDARDS --ST
               16  IMMUNOTHERAPY --STATISTICS AND NUMERICAL DATA
                1  IMMUNOTHERAPY --SUPPLY AND DISTRIBUTION --SD
              285  IMMUNOTHERAPY --TRENDS --TD
               12  IMMUNOTHERAPY --UTILIZATION --UT
               92  IMMUNOTHERAPY --VETERINARY --VE
      S7    33795  E1-E47
?p

Ref    Items  Index-term
E49       49  IMMUNOTHERAPY, ACTIVE --ADVERSE EFFECTS --AE
E50        2  IMMUNOTHERAPY, ACTIVE --ECONOMICS --EC
?p

Ref    Items    RT  Index-term
E1         2        IMMUNOTHERAPY, ACTIVE --ECONOMICS --EC
E2         6        IMMUNOTHERAPY, ACTIVE --HISTORY --HI
E3       271        IMMUNOTHERAPY, ACTIVE --METHODS --MT
E4         1        IMMUNOTHERAPY, ACTIVE --NURSING --NU
E5         2        IMMUNOTHERAPY, ACTIVE --PSYCHOLOGY --PX
E6         9        IMMUNOTHERAPY, ACTIVE --STANDARDS --ST
E7        34        IMMUNOTHERAPY, ACTIVE --TRENDS --TD
```

```
E8         1        IMMUNOTHERAPY, ACTIVE --UTILIZATION --UT
E9         8        IMMUNOTHERAPY, ACTIVE --VETERINARY --VE
E10     3314     8  IMMUNOTHERAPY, ADOPTIVE
E11       93        IMMUNOTHERAPY, ADOPTIVE --ADVERSE EFFECTS --AE
E12        5        IMMUNOTHERAPY, ADOPTIVE --ECONOMICS --EC

          Enter P or PAGE for more
?p

Ref    Items    RT  Index-term
E13        3        IMMUNOTHERAPY, ADOPTIVE --HISTORY --HI
E14        2        IMMUNOTHERAPY, ADOPTIVE --INSTRUMENTATION --IS
E15        2        IMMUNOTHERAPY, ADOPTIVE --LEGISLATION AND JURI
E16      652        IMMUNOTHERAPY, ADOPTIVE --METHODS --MT
E17        2        IMMUNOTHERAPY, ADOPTIVE --MORTALITY --MO
E18        3        IMMUNOTHERAPY, ADOPTIVE --NURSING --NU
E19        1        IMMUNOTHERAPY, ADOPTIVE --PSYCHOLOGY --PX
E20        8        IMMUNOTHERAPY, ADOPTIVE --STANDARDS --ST
E21        2        IMMUNOTHERAPY, ADOPTIVE --STATISTICS AND NUMER
E22       21        IMMUNOTHERAPY, ADOPTIVE --TRENDS --TD
E23        5        IMMUNOTHERAPY, ADOPTIVE --VETERINARY --VE
E24        0     1  IMMUNOTHERAPY, ALLERGEN

          Enter P or PAGE for more
?s e10-e23
             3314  IMMUNOTHERAPY, ADOPTIVE
               93  IMMUNOTHERAPY, ADOPTIVE --ADVERSE EFFECTS --AE
                5  IMMUNOTHERAPY, ADOPTIVE --ECONOMICS --EC
                3  IMMUNOTHERAPY, ADOPTIVE --HISTORY --HI
                2  IMMUNOTHERAPY, ADOPTIVE --INSTRUMENTATION --IS
                2  IMMUNOTHERAPY, ADOPTIVE --LEGISLATION AND JURI
              652  IMMUNOTHERAPY, ADOPTIVE --METHODS --MT
                2  IMMUNOTHERAPY, ADOPTIVE --MORTALITY --MO
                3  IMMUNOTHERAPY, ADOPTIVE --NURSING --NU
                1  IMMUNOTHERAPY, ADOPTIVE --PSYCHOLOGY --PX
                8  IMMUNOTHERAPY, ADOPTIVE --STANDARDS --ST
                2  IMMUNOTHERAPY, ADOPTIVE --STATISTICS AND NUMER
               21  IMMUNOTHERAPY, ADOPTIVE --TRENDS --TD
                5  IMMUNOTHERAPY, ADOPTIVE --VETERINARY --VE
      S8     3314  E10-E23
?e e10

Ref    Items Type  RT  Index-term
R1      3314         8 *IMMUNOTHERAPY, ADOPTIVE
R2      3314    X      DC=E2.95.520.400.330.50.400. (IMMUNOTHERAPY, ADOPTIV-
                       E)
R3      3314    X      DC=E5.478.550.520.50.400. (IMMUNOTHERAPY, ADOPTIVE)
R4         0    X    1 ADOPTIVE CELLULAR IMMUNOTHERAPY
R5       349    R   10 CYTAPHERESIS
R6      2633    R    9 KILLER CELLS, LYMPHOKINE-ACTIVATED
R7      2026    R    7 LYMPHOCYTES, TUMOR-INFILTRATING
R8        48    R   10 MONOCYTES, ACTIVATED KILLER
R9      2115    B    6 ADOPTIVE TRANSFER
?p
>>>Related terms display completed...
?s r1-r9
             3314  IMMUNOTHERAPY, ADOPTIVE
             3314  DC=E2.95.520.400.330.50.400.  (IMMUNOTHERAPY, ADOPTIVE)
             3314  DC=E5.478.550.520.50.400.  (IMMUNOTHERAPY, ADOPTIVE)
                0  ADOPTIVE CELLULAR IMMUNOTHERAPY
              349  CYTAPHERESIS
             2633  KILLER CELLS, LYMPHOKINE-ACTIVATED
             2026  LYMPHOCYTES, TUMOR-INFILTRATING
               48  MONOCYTES, ACTIVATED KILLER
             2115  ADOPTIVE TRANSFER
      S9     9538  R1-R9
?s passiveimmunotherapy
     S10        0  PASSIVEIMMUNOTHERAPY
?e passivetransfer
```

```
Ref    Items  Index-term
E1         0 *PASSIVETRANSFER
E2         1  PASSIVEXPOSITION
E3         9  PASSIVI
E4         1  PASSIVIE
E5         1  PASSIVIERENDER
E6         1  PASSIVIERUNG
E7         1  PASSIVISM
E8         2  PASSIVISTS
E9         2  PASSIVITAT
E10        1  PASSIVITE
E11        4  PASSIVITET
E12        1  PASSIVITION

          Enter P or PAGE for more
?s passive? (2n) transfer?
           62538  PASSIVE?
          270797  TRANSFER?
     S11    2801  PASSIVE? (2N) TRANSFER?
?ds

Set     Items   Description
S1        316   E3-E6
S2        258   'INVASIN' OR 'INVASION PROTEIN B, SALMONELLA TYPHIMURIUM' -
                   OR 'INVASION PROTEIN, RHIZOBIUM LOTI'
S3        437   ATTACH? (2N) EFFAC?
S4       3694   'EAE' OR 'EAE PROTEIN'
S5          1   'EAEAO157'
S6          1   'EAEALPHA'
S7      33795   E1-E47
S8       3314   E10-E23
S9       9538   R1-R9
S10         0   PASSIVEIMMUNOTHERAPY
S11      2801   PASSIVE? (2N) TRANSFER?
?s (s1 or s2 or s3 or s4 or s5 or s6) and (s7 or s8 or s9 or s10 or s11)
             316  S1
             258  S2
             437  S3
            3694  S4
               1  S5
               1  S6
           33795  S7
            3314  S8
            9538  S9
               0  S10
            2801  S11
     S12     396  (S1 OR S2 OR S3 OR S4 OR S5 OR S6) AND (S7 OR S8 OR S9 OR
                  S10 OR S11)
?s s12/1996:2004
             396  S12
         4083894  PY=1996 : PY=2004
     S13     215  S12/1996:2004
?s s12 not s13
             396  S12
             215  S13
     S14     181  S12 NOT S13
?s s14 and (antibod? or immune? or antiser? or immunoglob? or ivig or igiv or ivigg?)
             181  S14
          647792  ANTIBOD?
          249746  IMMUNE?
           54806  ANTISER?
          213753  IMMUNOGLOB?
            1763  IVIG
             151  IGIV
              75  IVIGG?
     S15      94  S14 AND (ANTIBOD? OR IMMUNE? OR ANTISER? OR IMMUNOGLOB?
                  OR IVIG OR IGIV OR IVIGG?)
?
```

```
File 155:MEDLINE(R) 1966-2004/Jun W2
       (c) format only 2004 The Dialog Corp.
*File 155: Medline has been reloaded. Accession numbers
have changed. Please see HELP NEWS 154 for details.

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?s (s1 or s2 or s3 or s5) and (s7 or s8 or s9 or s10 or s11)
             316  S1
             258  S2
             437  S3
               1  S5
           33795  S7
            3314  S8
            9538  S9
               0  S10
            2801  S11
     S17       2  (S1 OR S2 OR S3 OR S5) AND (S7 OR S8 OR S9 OR S10 OR S11)
?ds

Set     Items   Description
S1        316   E3-E6
S2        258   'INVASIN' OR 'INVASION PROTEIN B, SALMONELLA TYPHIMURIUM' -
                OR 'INVASION PROTEIN, RHIZOBIUM LOTI'
S3        437   ATTACH? (2N) EFFAC?
S4       3694   'EAE' OR 'EAE PROTEIN'
S5          1   'EAEAO157'
S6          1   'EAEALPHA'
S7      33795   E1-E47
S8       3314   E10-E23
S9       9538   R1-R9
S10         0   PASSIVEIMMUNOTHERAPY
S11      2801   PASSIVE? (2N) TRANSFER?
S12       396   (S1 OR S2 OR S3 OR S4 OR S5 OR S6) AND (S7 OR S8 OR S9 OR -
                S10 OR S11)
S13       215   S12/1996:2004
S14       181   S12 NOT S13
S15        94   S14 AND (ANTIBOD? OR IMMUNE? OR ANTISER? OR IMMUNOGLOB? OR
                IVIG OR IGIV OR IVIGG?)
S16         2   S15 NOT ENCEPHALOMY?
S17         2   (S1 OR S2 OR S3 OR S5) AND (S7 OR S8 OR S9 OR S10 OR S11)
?e ipa

Ref   Items   RT  Index-term
E1        3       IP-10
E2        5       IP-30 PROTEIN
E3      991      *IPA
E4        0    1  IPA (INDEPENDENT PRACTICE ASSOCIATION)
E5      263       IPAA
E6       21       IPAA ANTIGEN
E7        1       IPAABCD
E8       25       IPAAM
E9        1       IPAAS
E10     137       IPAB
E11      45       IPAB PROTEIN
E12       2       IPAB PROTEIN, SHIGELLA

          Enter P or PAGE for more
?s e6 or e10 or e11 or e12
              21  IPAA ANTIGEN
             137  IPAB
              45  IPAB PROTEIN
               2  IPAB PROTEIN, SHIGELLA
     S18     150  'IPAA ANTIGEN' OR 'IPAB' OR 'IPAB PROTEIN' OR 'IPAB
                  PROTEIN, SHIGELLA'
?p

Ref   Items  Index-term
```

```
E13        4  IPABC
E14       13  IPABCD
E15        5  IPABCDA
E16        1  IPABCDAR
E17        3  IPABP
E18        1  IPABPC
E19      118  IPAC
E20       44  IPAC PROTEIN
E21        1  IPACC
E22        1  IPACM
E23        3  IPACT
E24       73  IPAD

          Enter P or PAGE for more
?s e19 or e20
             118  IPAC
              44  IPAC PROTEIN
     S19     118  'IPAC' OR 'IPAC PROTEIN'
?ds

Set     Items   Description
S1        316   E3-E6
S2        258   'INVASIN' OR 'INVASION PROTEIN B, SALMONELLA TYPHIMURIUM' -
            OR 'INVASION PROTEIN, RHIZOBIUM LOTI'
S3        437   ATTACH? (2N) EFFAC?
S4       3694   'EAE' OR 'EAE PROTEIN'
S5          1   'EAEAO157'
S6          1   'EAEALPHA'
S7      33795   E1-E47
S8       3314   E10-E23
S9       9538   R1-R9
S10         0   PASSIVEIMMUNOTHERAPY
S11      2801   PASSIVE? (2N) TRANSFER?
S12       396   (S1 OR S2 OR S3 OR S4 OR S5 OR S6) AND (S7 OR S8 OR S9 OR -
            S10 OR S11)
S13       215   S12/1996:2004
S14       181   S12 NOT S13
S15        94   S14 AND (ANTIBOD? OR IMMUNE? OR ANTISER? OR IMMUNOGLOB? OR
            IVIG OR IGIV OR IVIGG?)
S16         2   S15 NOT ENCEPHALOMY?
S17         2   (S1 OR S2 OR S3 OR S5) AND (S7 OR S8 OR S9 OR S10 OR S11)
S18       150   'IPAA ANTIGEN' OR 'IPAB' OR 'IPAB PROTEIN' OR 'IPAB PROTEI-
            N, SHIGELLA'
S19       118   'IPAC' OR 'IPAC PROTEIN'
?s (s18 or s19)/1996:2004
             150  S18
             118  S19
         4083894  PY=1996 : PY=2004
     S20     104  (S18 OR S19)/1996:2004
?s s19 not s20
             118  S19
             104  S20
     S21      52  S19 NOT S20
?s s21 and (s7 or s8 or s9 or s10 or s11)
              52  S21
           33795  S7
            3314  S8
            9538  S9
               0  S10
            2801  S11
     S22       0  S21 AND (S7 OR S8 OR S9 OR S10 OR S11)
?b 411
```

File 155:MEDLINE(R) 1966-2004/Jun W2
(c) format only 2004 The Dialog Corp.
***File 155: Medline has been reloaded. Accession numbers**
have changed. Please see HELP NEWS 154 for details.

Set	Items	Description

?e ehec

Ref	Items	Index-term
E1	1	EHEBP1
E2	1	EHEBP2
E3	566	*EHEC
E4	4	EHECS
E5	2	EHEC8
E6	2	EHEDAUER
E7	1	EHEF
E8	11	EHEFRAU
E9	3	EHEFRAUEN
E10	1	EHEFUHRUNGSUNFAHIGKEIT
E11	6	EHEGATTEN
E12	1	EHEHALT

Enter P or PAGE for more

?s e3
S1 566 'EHEC'

?e epec

Ref	Items	Index-term
E1	1	EPEBETEGSEG
E2	1	EPEBETEGSEGENEK
E3	818	*EPEC
E4	1	EPEC TC
E5	1	EPECIALLY
E6	2	EPECIES
E7	3	EPECS
E8	1	EPECSORGAS
E9	1	EPECT
E10	1	EPECTIR
E11	1	EPEC280
E12	2	EPEDAPHIC

Enter P or PAGE for more

?s e3
S2 818 'EPEC'

?e entrohemor

Ref	Items	Index-term
E1	1	ENTROGLUCAGON
E2	1	ENTROHAEMORRHAGIC
E3	0	*ENTROHEMOR
E4	1	ENTROHEPATIC
E5	1	ENTROHINAL
E6	1	ENTROITUS
E7	1	ENTROLL
E8	1	ENTROLLED
E9	1	ENTROMEDIAL
E10	2	ENTROMERIC
E11	1	ENTRONIZACION
E12	1	ENTRONNEN

Enter P or PAGE for more

?s e2
S3 1 'ENTROHAEMORRHAGIC'

?e enteropatho

Ref	Items	Index-term
E1	2	ENTEROPATHIS
E2	3	ENTEROPATHISCHE

```
E3          0 *ENTEROPATHO
E4          1  ENTEROPATHOGEEN
E5        252  ENTEROPATHOGEN
E6          2  ENTEROPATHOGENCITY
E7         14  ENTEROPATHOGENE
E8          3  ENTEROPATHOGENECITY
E9          1  ENTEROPATHOGENEITY
E10         1  ENTEROPATHOGENEM
E11        18  ENTEROPATHOGENEN
E12        22  ENTEROPATHOGENER

          Enter P or PAGE for more
?p

Ref    Items  Index-term
E13       23  ENTEROPATHOGENES
E14        7  ENTEROPATHOGENESIS
E15        5  ENTEROPATHOGENETIC
E16     2594  ENTEROPATHOGENIC
E17        1  ENTEROPATHOGENICITE
E18        1  ENTEROPATHOGENICITIES
E19      142  ENTEROPATHOGENICITY
E20        1  ENTEROPATHOGENICLIKE
E21        1  ENTEROPATHOGENIH
E22        1  ENTEROPATHOGENIS
E23        2  ENTEROPATHOGENITAT
E24        4  ENTEROPATHOGENNOI

          Enter P or PAGE for more
?s e16 or e20 or e19
          2594  ENTEROPATHOGENIC
             1  ENTEROPATHOGENICLIKE
           142  ENTEROPATHOGENICITY
      S4  2697  'ENTEROPATHOGENIC' OR 'ENTEROPATHOGENICLIKE' OR
                'ENTEROPATHOGENICITY'
?ds

Set      Items   Description
S1         566   'EHEC'
S2         818   'EPEC'
S3           1   'ENTROHAEMORRHAGIC'
S4        2697   'ENTEROPATHOGENIC' OR 'ENTEROPATHOGENICLIKE' OR 'ENTEROPAT-
              HOGENICITY'
?s (s1 or s2 or s3 or s4)/1996:2004
           566  S1
           818  S2
             1  S3
          2697  S4
       4083894  PY=1996 : PY=2004
      S5  1389  (S1 OR S2 OR S3 OR S4)/1996:2004
?s s4 not s5
          2697  S4
          1389  S5
      S6  1704  S4 NOT S5
?s s6 and (immunother? or ivig or immunoglob? or antiser? or (passive? (2n) transfer?))
          1704  S6
         33807  IMMUNOTHER?
          1763  IVIG
        213753  IMMUNOGLOB?
         54806  ANTISER?
         62538  PASSIVE?
        270797  TRANSFER?
          2801  PASSIVE?(2N)TRANSFER?
      S7   120  S6 AND (IMMUNOTHER? OR IVIG OR IMMUNOGLOB? OR ANTISER? OR
                (PASSIVE? (2N) TRANSFER?))
?s s7 and (intimin? or ipa or ipaa or ipab or invasin? or eaea or eaeb or (attach? (2n) e
ffac?))
           120  S7
           316  INTIMIN?
```

```
              991  IPA
              263  IPAA
              137  IPAB
              300  INVASIN?
              185  EAEA
               78  EAEB
            87797  ATTACH?
             1321  EFFAC?
              437  ATTACH?(2N)EFFAC?
S8              5  S7 AND (INTIMIN? OR IPA OR IPAA OR IPAB OR INVASIN? OR
                   EAEA OR EAEB OR (ATTACH? (2N) EFFAC?))
?t s8/9/all

 8/9/1
```

File 155:MEDLINE(R) 1966-2004/Jun W2
(c) format only 2004 The Dialog Corp.
*File 155: Medline has been reloaded. Accession numbers have changed. Please see HELP NEWS 154 for details.

Set	Items	Description

Cost is in DialUnits
?ds

Set	Items	Description
S1	2154	'ESCHERICHIA COLI O157'
S2	2997	R1:R8
S3	9556	R1-R6 OR R8
S4	153	(S1 OR S2 OR S3) AND (IMMUNOTHER? OR (PASSIVE? (2N) TRANSFER?) OR IVIG OR IGGIV OR IVIGG OR IGG OR IGM OR SIGA OR IGA OR IG)
S5	109	S4/1996:2004
S6	44	S4 NOT S5

?t s6/9/1 3 4 5 12 15 17 18 19 24 25 29 33 34 37 39 41 43 44

6/9/1
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2004 The Dialog Corp. All rts. reserv.

12758588 PMID: 8526016
Inhibition of enteropathogenic Escherichia coli (EPEC) adherence to HeLa cells by human colostrum. Detection of specific sIgA related to EPEC outer-membrane proteins.
Camara L M; Carbonare S B; Scaletsky I C; da Silva M L; Carneiro-Sampaio M M
Department of Immunology, University of Sao Paulo, Brazil.
Advances in experimental medicine and biology (UNITED STATES) 1995, 371A p673-6, ISSN 0065-2598 Journal Code: 0121103
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Female; Human; Pregnancy
Descriptors: **Adhesins, Escherichia coli** --immunology--IM; *Antibodies, Bacterial--immunology--IM; *Bacterial Adhesion--drug effects--DE; *Colostrum; *Escherichia coli--drug effects--DE; *Immunoglobulin A, Secretory--immunology--IM; Antibodies, Bacterial --isolation and purification--IP; Colostrum--chemistry--CH; Colostrum--immunology--IM; Escherichia coli--immunology--IM; Escherichia coli--pathogenicity--PY; Escherichia coli--physiology--PH; Hela Cells; Immunoglobulin A, Secretory --isolation and purification--IP; Infant, Newborn; Molecular Weight; Virulence
CAS Registry No.: 0 (Adhesins, Escherichia coli); 0 (Antibodies, Bacterial); 0 (Immunoglobulin A, Secretory)
Record Date Created: 19960124
Record Date Completed: 19960124

6/9/3
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2004 The Dialog Corp. All rts. reserv.

12665242 PMID: 7790086
Heterologous antigen expression in Vibrio cholerae vector strains.
Butterton J R; Beattie D T; Gardel C L; Carroll P A; Hyman T; Killeen K P ; Mekalanos J J; Calderwood S B
Infectious Disease Unit, Massachusetts General Hospital, Boston 02114, USA.
Infection and immunity (UNITED STATES) Jul 1995, 63 (7) p2689-96, ISSN 0019-9567 Journal Code: 0246127
Contract/Grant No.: AI34968; AI; NIAID
Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Live attenuated vector strains of Vibrio cholerae were derived from Peru-2, a Peruvian El Tor Inaba strain deleted for the cholera toxin genetic element and attRS1 sequences, which was developed as a live, oral vaccine strain. A promoterless gene encoding the Shiga-like toxin I B subunit (slt-IB) was inserted in the V. cholerae virulence gene irgA by in vivo marker exchange, such that slt-IB was under transcriptional control of the iron-regulated irgA promoter. slt-IB was also placed under transcriptional control of the V. cholerae heat shock promoter, htpGp, and introduced into either the irgA or lacZ locus, or both loci, on the chromosome of Peru-2, generating JRB10, JRB11, or JRB12, respectively. A new technique was used to perform allelic exchange with lacZ. This method uses plasmid p6891MCS, a pBR327 derivative containing cloned V. cholerae lacZ, to insert markers of interest into the V. cholerae chromosome. Recombinants can be detected by simple color screening and antibiotic selection. In vitro measurements of Slt-IB produced by the vector strains suggested that expression of Slt-IB from the irgA and htpG promoters was synergistic and that two copies of the gene for Slt-IB increased expression over a single copy. The V. cholerae vectors colonized the gastrointestinal mucosa of rabbits after oral immunization, as demonstrated by very high serum antibody responses to V. cholerae antigens. Comparison of the serologic responses to the B subunit of cholera toxin (CtxB) following orogastric inoculation either with the wild-type C6709 or with Peru-10, a strain containing ctxB regulated by htpGp, suggested that both the cholera toxin and heat shock promoters were active in vivo, provoking comparable immunologic responses. Orogastric inoculation of rabbits with vector strains evoked serum immunoglobulin G (**IgG**) responses to Slt-IB in two of the four strains tested; all four strains produced biliary **IgA** responses. No correlation was observed between the type of promoter expressing slt-IB and the level of serum **IgG** or biliary **IgA** response, but the vector strain containing two copies of the gene for slt-IB evoked greater serum **IgG** responses than strains containing a single copy, consistent with the increased expression of Slt-IB from this strain observed in vitro. A comparison of the serum and biliary antibody responses to Slt-IB expressed from htpGp versus CtxB expressed from the same promoter suggested that CtxB is a more effective orally delivered immunogen.

Tags: Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Descriptors: *Antigens, Bacterial--genetics--GE; *Gene Expression Regulation, Bacterial; *Recombinant Proteins--metabolism--ME; *Vaccines, Attenuated--genetics--GE; *Vaccines, Synthetic--genetics--GE; *Vibrio cholerae--genetics--GE; Administration, Oral; Animals; Animals, Suckling; Antibodies, Bacterial--biosynthesis--BI; Bacterial Toxins--genetics--GE; Base Sequence; Bile--immunology--IM; Genes, Structural, Bacterial; Genetic Vectors--genetics--GE; Immunoglobulin A--biosynthesis--BI; Immunoglobulin G --biosynthesis--BI; Lac Operon; Mice; Mice, Inbred Strains; Molecular Sequence Data; Oligonucleotide Probes--chemistry--CH; Promoter Regions (Genetics); Rabbits; **Shiga-Like Toxin I** ; Vibrio cholerae--immunology--IM

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Antigens, Bacterial); 0 (Bacterial Toxins); 0 (Genetic Vectors); 0 (Immunoglobulin A); 0 (Immunoglobulin G); 0 (Oligonucleotide Probes); 0 (Recombinant Proteins); 0 (Shiga-Like Toxin I); 0 (Vaccines, Attenuated); 0 (Vaccines, Synthetic)

Gene Symbol: htpG; irgA; lacZ

Record Date Created: 19950727

Record Date Completed: 19950727

6/9/4

DIALOG(R)File 155:MEDLINE(R)

12544989 PMID: 7765875

Production of the chimeric-binding protein, maltose-binding protein-protein A, by gene fusion.

Kobatake E; Ikariyama Y; Aizawa M

Department of Bioengineering, Faculty of Bioscience and Biotechnology,

Tokyo Institute of Technology Nagatsuta, Yokohama, Japan.
Journal of biotechnology (NETHERLANDS) Jan 31 1995, 38 (3) p263-8, ISSN 0168-1656 Journal Code: 8411927
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: BIOTECHNOLOGY

A fusion protein between maltose-binding protein (MBP) and staphylococcal protein A (SpA) was genetically produced. The gene fusion plasmid, pMALPA2, was constructed by inserting the protein A gene into an expression vector of maltose-binding protein in frame, and was expressed efficiently in Escherichia coli. The resulting fusion protein of molecular mass 65 kDa, retained the activity of both MBP and SpA (binding capability to amylose and immunoglobulin G). This chimeric-binding protein was used as an adhesive molecule for immobilization of antibodies to a solid-phase surface for enzyme immunoassay. An enzyme immunoassay was performed with the fusion protein, and human **IgG** was determined in the concentration range from 10(-4) to 10(-6) g ml-1.

Tags: Human

Descriptors: ATP-Binding Cassette Transporters; *Carrier Proteins --genetics--GE; *Cloning, Molecular; * **Escherichia coli Proteins** ; *Monosaccharide Transport Proteins; *Staphylococcal Protein A--genetics--GE ; Escherichia coli--genetics--GE; Immunoenzyme Techniques; Immunoglobulin G --analysis--AN; Plasmids; Recombinant Fusion Proteins--genetics--GE

CAS Registry No.: 0 (ATP-Binding Cassette Transporters); 0 (Carrier Proteins); 0 (Escherichia coli Proteins); 0 (Immunoglobulin G); 0 (Monosaccharide Transport Proteins); 0 (Plasmids); 0 (Recombinant Fusion Proteins); 0 (Staphylococcal Protein A); 0 (maltose transport system, E coli); 0 (maltose-binding protein)

Gene Symbol: MBP; SpA
Record Date Created: 19950413
Record Date Completed: 19950413

6/9/5
DIALOG(R)File 155:MEDLINE(R)

10394080 PMID: 7727902

An outbreak due to enterohaemorrhagic Escherichia coli O157:H7 in a children day care centre characterized by person-to-person transmission and environmental contamination.

Reida P; Wolff M; Pohls H W; Kuhlmann W; Lehmacher A; Aleksic S; Karch H; Bockemuhl J

Gesundheitsamt, Landkreis Hagenow, Universitat Wurzburg.

Zentralblatt fur Bakteriologie - international journal of medical microbiology (GERMANY) Nov 1994, 281 (4) p534-43, ISSN 0934-8840 Journal Code: 9203851
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

An outbreak of gastrointestinal disease and haemolytic uraemic syndrome caused by Escherichia coli O157:H7 was investigated. The outbreak occurred in a day care centre located in northern Germany in August 1992 and involved 39 children and two adults. Furthermore, four asymptomatic infections were detected among the staff. Initial and secondary cases were reported over a 30-day interval, with cases occurring in three waves. Person-to-person contact and environmental contamination were assumed to be the main mode of transmission. The source of the outbreak has remained unknown but it is likely that primary or secondary contamination of the day care centre's kitchen, too, played a role in the spread of infections. The organisms were isolated from two open packs of deep-frozen stuffed cabbage rolls and turkey scallops in batter, and furthermore from swabs from two kitchen utensils. Of the 39 cases with diarrhoea, three developed a haemolytic uraemic syndrome; one of the latter patients died. In 8 of the cases as well as in four healthy adult employees, E. coli O157:H7 was

isolated from stool samples, and in two stool culture-negative cases the presence of **IgM** antibody to O157 LPS indicated recent infection. The E. coli O157:H7 isolates from the cases and the kitchen were of identical phage type and yielded identical biochemical reactions. All E. coli O157:H7 isolates harboured stable slt-II genes. However, slt-I genes could only be demonstrated in the primary cultures and were lost during subcultivation. This is the largest outbreak caused by enterohaemorrhagic E. coli O157:H7 that has been documented in Germany so far. The high infectivity of the organism which was demonstrated by person-to-person transmission and propagation within certain groups of children stresses the need for strict hygienic measures and early case reporting when such infections occur in susceptible settings like day care centres, nursing homes, or hospitals.

Tags: Female; Human; Male

Descriptors: *Diarrhea--epidemiology--EP; *Disease Outbreaks; *Escherichia coli Infections--epidemiology--EP; Adult; Antibodies, Bacterial--blood--BL; Bacterial Toxins--genetics--GE; Child Day Care Centers; Child, Preschool; Escherichia coli Infections--transmission--TM; Food Microbiology; Germany; Infant; **Shiga-Like Toxin I**

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Bacterial Toxins); 0 (Shiga-Like Toxin I)

Record Date Created: 19950601

Record Date Completed: 19950601

6/9/12

DIALOG(R)File 155:MEDLINE(R)

09900128 PMID: 8246258

Detection of serum and faecal antibodies in haemorrhagic colitis caused by Escherichia coli O157.

Siddons C A; Chapman P A

Public Health Laboratory, Sheffield.

Journal of medical microbiology (SCOTLAND) Dec 1993, 39 (6) p408-15, ISSN 0022-2615 Journal Code: 0224131

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Cases of culture-confirmed clinically typical haemorrhagic colitis caused by verocytotoxin-producing (VT+) Escherichia coli O157 and age- and sex-matched control patients were examined for antibodies to E. coli O157. Serum samples from 28 cases and 34 patients in control group 1 were examined for VT1- and VT2-neutralising antibodies, E. coli O157 agglutinating antibodies, and by an enzyme immunoassay (EIA) technique for **IgG** antibodies against smooth lipopolysaccharide purified from E. coli O157 and for **IgG** antibodies against whole intact E. coli O157 cells. Differences between antibody titres were significant when compared by a Wilcoxon two-sample test for E. coli O157 agglutinating antibodies ($p < 0.05$) and **IgG** antibodies against whole cells ($p < 0.001$). The whole-cell EIA was used further to examine faecal samples from 93 cases and 47 patients in control group 2 for **IgA** antibodies. Elevated levels of faecal **IgA** specific for E. coli O157 were found in 59 (63.4%) of 93 cases but in only 10 (21.2%) of 47 control patients ($p < 0.001$); follow-up faecal samples from five cases all showed marked rises in levels of **IgA** that appeared to coincide with cessation of excretion of the organism. Detection of specific faecal **IgA** with a whole-cell EIA, although requiring further evaluation, may be a useful addition to tests currently available for the diagnosis of infection by VT+ E. coli O157.

Tags: Comparative Study; Human

Descriptors: *Antibodies, Bacterial--analysis--AN; *Colitis--immunology --IM; *Escherichia coli--immunology--IM; *Escherichia coli Infections --immunology--IM; *Gastrointestinal Hemorrhage--immunology--IM; Agglutination Tests; Animals; Antibodies, Bacterial--blood--BL; Bacterial Toxins --biosynthesis--BI; Case-Control Studies; Cross Reactions; Escherichia coli --pathogenicity--PY; Feces--chemistry--CH; Follow-Up Studies; Immunoenzyme Techniques; Immunoglobulin A, Secretory--analysis--AN; Neutralization Tests ; **Shiga-Like Toxin I** ; Vero Cells

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Bacterial Toxins); 0 (Immunoglobulin A, Secretory); 0 (Shiga-Like Toxin I)
Record Date Created: 19940104
Record Date Completed: 19940104

6/9/15
DIALOG(R)File 155:MEDLINE(R)

09813468 PMID: 8365810
Differences in verotoxin neutralizing activity of therapeutic immunoglobulins and sera from healthy controls.
Bitzan M; Klemt M; Steffens R; Muller-Wiefel D E
Universitats-Kinderklinik, Hamburg, Germany.
Infection (GERMANY) May-Jun 1993, 21 (3) p140-5, ISSN 0300-8126
Journal Code: 0365307
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Intestinal infection by Escherichia coli O157 and other verotoxin (VT) producing E. coli has been increasingly recognized as an important factor for the causation of classic (enteropathic) hemolytic uremic syndrome (HUS) and hemorrhagic colitis (HC). Toxins most frequently involved are VT1 and VT2. As with other toxin-mediated diseases, administration of immunoglobulin (**Ig**) may be beneficial. However, little is known about the immune response elicited by the toxin(s), and the prevalence of VT neutralizing antibodies in the healthy population. We studied the capacity of seven Igs and a commercial plasma preparation to neutralize four different VTs (VT1, VT2, VT2c and VT2e). The results were compared with the neutralization titers (NT50%) of normal human serum samples from various age groups. Plasma products and normal sera were separated by protein G affinity chromatography to investigate the factor(s) responsible for VT neutralization. All Igs neutralized VT1 (8 to 96 NT50%). None of them inhibited VT2, VT2c or VT2e effectively. In contrast, none of 40 pediatric, and only one of 20 adult control sera (starting dilution 1:4) neutralized VT1 (25 NT50%). All 60 samples as well as the plasma preparation blocked VT2 (22 to 446 NT50%, median 137), but not VT2c and VT2e. The VT1 neutralizing activity was eluted with the **IgG** fraction. The VT2 neutralizing activity was not bound by protein G, but was recovered in the **IgG** -free effluent. In conclusion, therapeutic Igs significantly neutralize VT1, but are largely ineffective against other VTs. In contrast, all control sera inhibited VT2, but rarely VT1.(ABSTRACT TRUNCATED AT 250 WORDS)
Tags: Comparative Study; Human
Descriptors: *Bacterial Toxins--immunology--IM; *Blood--immunology--IM; *Enterotoxins--immunology--IM; *Escherichia coli; *Immunoglobulins --immunology--IM; Adolescent; Adult; Aged; Bacterial Toxins--chemistry--CH; Child; Child, Preschool; Chromatography, Affinity; Immunization, Passive; Immunoglobulin G--isolation and purification--IP; Infant; Middle Aged; Nerve Tissue Proteins; Neutralization Tests; Plasma--immunology--IM; **Shiga-Like Toxin I** ; Shiga-Like Toxin II
CAS Registry No.: 0 (Bacterial Toxins); 0 (Enterotoxins); 0 (G-substrate); 0 (Immunoglobulin G); 0 (Immunoglobulins); 0 (Nerve Tissue Proteins); 0 (Shiga-Like Toxin I); 0 (Shiga-Like Toxin II)
Record Date Created: 19931005
Record Date Completed: 19931005

6/9/17
DIALOG(R)File 155:MEDLINE(R)

09675741 PMID: 8472763
The role of Escherichia coli O 157 infections in the classical (enteropathic) haemolytic uraemic syndrome: results of a Central European, multicentre study.

Bitzan M; Ludwig K; Klemt M; Konig H; Buren J; Muller-Wiefel D E
Kinderklinik, Universitatskrankenhaus Hamburg-Eppendorf, Federal Republic of Germany.
Epidemiology and infection (ENGLAND) Apr 1993, 110 (2) p183-96, ISSN 0950-2688 Journal Code: 8703737
Document type: Journal Article; Multicenter Study
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

To assess the importance of infection by Verotoxin (VT) producing Escherichia coli (VTEC) in children with HUS in Central Europe, stool and/or serum samples obtained from 147 patients from 28 paediatric centres were prospectively examined for the presence of VTEC and the kinetics of faecal VT titres (FVT), and for VT neutralization titres and antibodies against E. coli O 157 lipopolysaccharide, respectively. Ninety-two percent of the patients had classic (enteropathic) HUS (E+ HUS). Evidence of VTEC infection was obtained in 86% of them. VTEC/FVT were identified in 55/118 E+ cases (47%). A prominent feature was the frequent isolation of sorbitol-fermenting, VT2-producing E. coli O 157.H-.VT1 (C600/H19) was neutralized by 9%, and VT2 (C600/933W) by 99% of the initial serum samples from E+ patients, compared to 3% (VT1) and 100% (VT2) from age-related controls. Fourfold titre rises against VT1 and/or VT2 were observed in 13/70 (19%), and significantly elevated O 157 LPS **IgM** and/or **IgA** antibodies in 106/128 (83%) of the E+ patients. The ubiquitous VT2 neutralizing principle in the serum of HUS patients as of healthy controls warrants further investigations.

Tags: Female; Human; Male
Descriptors: *Bacterial Toxins--biosynthesis--BI; *Escherichia coli --metabolism--ME; *Escherichia coli Infections--diagnosis--DI; *Hemolytic-Uremic Syndrome--microbiology--MI; Adolescent; Adult; Antibodies, Bacterial--analysis--AN; Bacterial Toxins--immunology--IM; Child; Child, Preschool; Cytotoxins--biosynthesis--BI; Cytotoxins --immunology--IM; Enterotoxins--biosynthesis--BI; Enterotoxins--immunology --IM; Escherichia coli--immunology--IM; Escherichia coli--isolation and purification--IP; Feces--microbiology--MI; Immunoglobulins--analysis--AN; Infant; Lipopolysaccharides--analysis--AN; Prospective Studies; **Shiga-Like Toxin I**
CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Bacterial Toxins); 0 (Cytotoxins); 0 (Enterotoxins); 0 (Immunoglobulins); 0 (Lipopolysaccharides); 0 (Shiga-Like Toxin I)
Record Date Created: 19930518
Record Date Completed: 19930518

6/9/18
DIALOG(R)File 155:MEDLINE(R)

09648930 PMID: 8095995
Binding of bacterial adhesins to rat glomerular mesangium in vivo.
Miettinen A; Westerlund B; Tarkkanen A M; Tornroth T; Ljungberg P; Renkonen O V; Korhonen T K
Department of Bacteriology and Immunology, University of Helsinki, Finland.
Kidney international (UNITED STATES) Mar 1993, 43 (3) p592-600, ISSN 0085-2538 Journal Code: 0323470
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Two well characterized bacterial adhesins, the O75X fimbriae of Escherichia coli and the type-3 fimbriae of Klebsiellae, with in vitro affinities to type IV and V collagens, respectively, were used to test whether bacterial components with affinity for glomerular matrix could bind to glomeruli in vivo. The purified fimbrial proteins were injected into rats, and kidney samples were studied by immunofluorescence at two hours to nine months postinjection. The O75X, but not the type-3 fimbriae, formed

mesangial deposits that persisted for months. Preincubation of the O75X fimbriae with type IV collagen significantly reduced the glomerular binding. The fimbrial deposits were extracellular, as anti-O75X **IgG** injected into rats bound to glomeruli. Proteinuria or histological damage could not be detected even after passive or active immunizations of the rats. The results demonstrate that bacterial adhesins may bind in vivo to and persist in glomeruli by their specific affinities. The results also indicate that additional factors provided by the bacteria or the host are needed for glomerular damage to take place.

Tags: Female; Support, Non-U.S. Gov't

Descriptors: *Adhesins, Bacterial; *Bacterial Adhesion--physiology--PH; *Bacterial Outer Membrane Proteins--metabolism--ME; *Bacterial Proteins --metabolism--ME; *Fimbriae Proteins; *Glomerular Mesangium--microbiology --MI; **Adhesins, Escherichia coli** ; Animals; Collagen--metabolism--ME; Escherichia coli--metabolism--ME; Extracellular Space--metabolism--ME; Extracellular Space--microbiology--MI; Fluorescent Antibody Technique; Glomerular Mesangium--metabolism--ME; Glomerular Mesangium--ultrastructure --UL; Kinetics; Klebsiella pneumoniae--metabolism--ME; Microscopy, Electron ; Rats; Rats, Sprague-Dawley

CAS Registry No.: 0 (Adhesins, Bacterial); 0 (Adhesins, Escherichia coli); 0 (Bacterial Outer Membrane Proteins); 0 (Bacterial Proteins); 0 (Klebsiella pneumoniae type 3 fimbrial adhesin); 147680-16-8 (Fimbriae Proteins); 9007-34-5 (Collagen)

Record Date Created: 19930422

Record Date Completed: 19930422

6/9/19

DIALOG(R)File 155:MEDLINE(R)

09619887 PMID: 8094929

Immunization of rabbits with enterotoxigenic E. coli colonization factor antigen (CFA/I) encapsulated in biodegradable microspheres of poly (lactide-co-glycolide).

Edelman R; Russell R G; Losonsky G; Tall B D; Tacket C O; Levine M M; Lewis D H

Department of Medicine, University of Maryland School of Medicine, Baltimore 21201.

Vaccine (ENGLAND) 1993, 11 (2) p155-8, ISSN 0264-410X

Journal Code: 8406899

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

We have searched for an effective oral delivery system for a purified enterotoxigenic Escherichia coli (ETEC) fimbrial adhesin, CFA/I, which elicits anti-colonization immunity. Purified CFA/I antigen encapsulated in biodegradable polymer microspheres of poly (DL-lactide-co-glycolide) (PLG) induced a vigorous, systemic CFA/I **IgG** antibody response in rabbits immunized once via intragastric tube; oral, unencapsulated CFA/I induced little or no circulating antibody. CFA/I-specific, S- **IgA** coproantibody was detected in one of three rabbits fed with the CFA/I-PLG microsphere vaccine. We conclude that PLG microspheres protected CFA/I from degradation in the stomach and effectively delivered the antigen for processing by the host's immune system.

Tags: Comparative Study; Support, Non-U.S. Gov't

Descriptors: *Antibodies, Bacterial--biosynthesis--BI; *Bacterial Outer Membrane Proteins--immunology--IM; *Bacterial Proteins--immunology--IM; *Bacterial Vaccines; *Escherichia coli--immunology--IM; *Fimbriae Proteins; *Immunoglobulin A, Secretory--biosynthesis--BI; *Microspheres; *Polyglactin 910; **Adhesins, Escherichia coli** ; Administration, Oral; Animals; Bacterial Outer Membrane Proteins--administration and dosage--AD; Bacterial Proteins --administration and dosage--AD; Bacterial Vaccines--administration and dosage--AD; Bacterial Vaccines--immunology--IM; Biodegradation; Drug Compounding; Escherichia coli Vaccines; Feces; Immunoglobulin A, Secretory --immunology--IM; Injections, Intramuscular; Polyglactin 910 --pharmacokinetics--PK; Rabbits

CAS Registry No.: 0 (Adhesins, Escherichia coli); 0 (Antibodies, Bacterial); 0 (Bacterial Outer Membrane Proteins); 0 (Bacterial Proteins); 0 (Bacterial Vaccines); 0 (Escherichia coli Vaccines); 0 (Immunoglobulin A, Secretory); 0 (colonization factor antigens); 147680-16-8 (Fimbriae Proteins); 34346-01-5 (Polyglactin 910)
Record Date Created: 19930323
Record Date Completed: 19930323

6/9/24
DIALOG(R)File 155:MEDLINE(R)

09054514 PMID: 1921166
[Hemorrhagic colitis and hemolytic-uremic syndrome--E. coli as the etiologic agent. I. Bacteriology and pathogenesis]
Die hamorrhagische Colitis und das hamolytisch-uramische Syndrom--E.coli als atiologisches Agens. I. Bakteriologie und Pathogenese.
Tschape H; Bohme G
Bundesgesundheitsamt Robert-Koch-Institut.
Kinderarztliche Praxis (GERMANY) Jun 1991, 59 (6) p161-5, ISSN 0023-1495 Journal Code: 0376356
Document type: Journal Article; Review; Review, Tutorial ; English Abstract
Languages: GERMAN
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Since 1983 when the connection between haemorrhagic colitis (HC), haemolytic uraemic syndrome (HUS), and intestinal infections by verotoxin-producing E. coli (VTEC, EHEC) was demonstrated, a lot of arguments has been accumulated showing verotoxins (Shiga-like toxins, SLT) and adhesive fimbria to play a key role in the pathogenicity of the respective E. coli group. The toxins bind via Gb3 receptors to the target cells and after internalization inhibit the protein synthesis. Due to the particular clustering of receptors at cell surfaces, vascular endothelial cells, intestinal epithelial cells as well as kidney and nerve tissues are especially affected. The severity of illness is obviously dependent on the relation between release of toxins and the actual level of anti-toxin- **IgG** in the blood. (62 Refs.)
Tags: Human
Descriptors: *Colitis--microbiology--MI; *Escherichia coli--pathogenicity --PY; *Escherichia coli Infections--microbiology--MI; *Gastrointestinal Hemorrhage--microbiology--MI; *Hemolytic-Uremic Syndrome--microbiology--MI ; Bacterial Toxins--metabolism--ME; Child, Preschool; Infant; **Shiga-Like Toxin I**
CAS Registry No.: 0 (Bacterial Toxins); 0 (Shiga-Like Toxin I)
Record Date Created: 19911107
Record Date Completed: 19911107

6/9/25
DIALOG(R)File 155:MEDLINE(R)

09009470 PMID: 1880650
High incidence of serum antibodies to Escherichia coli O157 lipopolysaccharide in children with hemolytic-uremic syndrome.
Bitzan M; Moebius E; Ludwig K; Muller-Wiefel D E; Heesemann J; Karch H
Department of Pediatrics, University Hospital Hamburg-Eppendorf, Germany.
Journal of pediatrics (UNITED STATES) Sep 1991, 119 (3) p380-5, ISSN 0022-3476 Journal Code: 0375410
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: AIM; INDEX MEDICUS
Because the classic hemolytic-uremic syndrome has been etiologically linked to intestinal infections by Escherichia coli O157 and other

verotoxin-producing E. coli (VTEC), we examined 22 consecutive children with acute hemolytic-uremic syndrome for the presence of VTEC, using microbiologic methods, and for a specific immune response to O157 lipopolysaccharide in acute-phase and follow-up sera, using the indirect hemagglutination assay and the immunoblot procedure. Of 22 children with enteropathic hemolytic-uremic syndrome, 15 (68%) had evidence of VTEC infection by culture of the pathogen or detection of free verotoxin in the feces, or both. Significantly elevated titers of short-lived agglutinins and **IgM** class antibodies against the O157 lipopolysaccharide were found in 20 (91%) of 22 patients, but not in two of three patients with non-O157 E. coli isolates or in healthy children or children with diarrhea caused by other enteric pathogens (p less than 0.01). The combined microbiologic and serologic procedures provided evidence for VTEC infection in all 22 patients. The high incidence of anti-O157 lipopolysaccharide antibodies in these patients indicates the predominance and the pathogenic potential of this serogroup. Both serologic techniques proved to be valuable tools to further characterize this form of hemolytic-uremic syndrome. Future studies on the induction of protective immunity seem warranted.

Tags: Human

Descriptors: *Antibodies, Bacterial--blood--BL; *Bacterial Toxins --analysis--AN; *Escherichia coli--immunology--IM; *Hemolytic-Uremic Syndrome--immunology--IM; *Lipopolysaccharides--immunology--IM; Antibodies, Anti-Idiotypic--immunology--IM; Child; Child, Preschool; Feces--chemistry --CH; Feces--microbiology--MI; Hemagglutination Tests; Hemolytic-Uremic Syndrome--microbiology--MI; Immunoglobulin M--immunology--IM; Infant; Serotyping; **Shiga-Like Toxin I**

CAS Registry No.: 0 (Antibodies, Anti-Idiotypic); 0 (Antibodies, Bacterial); 0 (Bacterial Toxins); 0 (Immunoglobulin M); 0 (Lipopolysaccharides); 0 (Shiga-Like Toxin I)

Record Date Created: 19911001

Record Date Completed: 19911001

6/9/29

DIALOG(R)File 155:MEDLINE(R)

08612957 PMID: 1696237

Local and systemic antibody response in infants after oral administration of inactivated enteropathogenic E. coli serotype O111 and O55.

Lodinova-Zadnikova R; Korych B; Gajdostikova K

Institute for Care of Mother and Child, Prague.

Folia microbiologica (CZECHOSLOVAKIA) 1990, 35 (2) p155-62, ISSN 0015-5632 Journal Code: 0376757

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

In ten infants divided into two groups (up to one month of age and at 2-7 months of age) the dynamics and formation of different antibody isotypes produced locally in the intestine and in serum after orally administered inactivated enteropathogenic E. coli strains O111 and O55 was followed during 30 d after the first and booster dose by using an indirect immunofluorescence method. Infants up to one month of age produced antibodies of **IgM** isotype in stool together with the **IgA** isotype after the first and booster dose of the vaccine against both antigens. Serum **IgG** antibody increased after 2 d following the first and second dose of antigens and remained higher during 5 d. The infants aged 2-7 months expressed predominantly the **IgA** isotype response in stool after the first and booster dose of antigens. The serum immunoglobulin levels did not change after oral antigen administration.

Tags: Comparative Study; Human

Descriptors: *Antibodies, Bacterial--biosynthesis--BI; *Antigens, Bacterial--immunology--IM; *Bacterial Vaccines--immunology--IM; *Escherichia coli--immunology--IM; *Feces--analysis--AN; **Adhesins, Escherichia coli** ; Administration, Oral; Bacterial Outer Membrane Proteins--immunology--IM; Bacterial Vaccines--administration and dosage--AD; Immunization; Immunoglobulin A--biosynthesis--BI; Immunoglobulin G--biosynthesis--BI;

Immunoglobulin M--biosynthesis--BI; Infant; Infant, Newborn; O Antigens; Vaccines, Inactivated--administration and dosage--AD; Vaccines, Inactivated--immunology--IM
CAS Registry No.: 0 (Adhesins, Escherichia coli); 0 (Antibodies, Bacterial); 0 (Antigens, Bacterial); 0 (Bacterial Outer Membrane Proteins); 0 (Bacterial Vaccines); 0 (Immunoglobulin A); 0 (Immunoglobulin G); 0 (Immunoglobulin M); 0 (O Antigens); 0 (Vaccines, Inactivated)
Record Date Created: 19900913
Record Date Completed: 19900913

6/9/33
DIALOG(R)File 155:MEDLINE(R)

07755354 PMID: 2896295
Agglutination of E. coli by secretory IgA --a result of interaction between bacterial mannose-specific adhesins and immunoglobulin carbohydrate?
Wold A E; Mestecky J; Svanborg Eden C
Department of Clinical Immunology, University of Goteborg, Sweden.
Monographs in allergy (SWITZERLAND) 1988, 24 p307-9, ISSN 0077-0760 Journal Code: 0077707
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Human; Support, Non-U.S. Gov't
Descriptors: *Escherichia coli--metabolism--ME; *Immunoglobulin A, Secretory--metabolism--ME; *Receptors, Immunologic; **Adhesins, Escherichia coli** ; Agglutination; Bacterial Adhesion; Bacterial Outer Membrane Proteins --metabolism--ME; Galactosides--metabolism--ME; Glycoproteins--metabolism --ME; Mannose--metabolism--ME
CAS Registry No.: 0 (Adhesins, Escherichia coli); 0 (Bacterial Outer Membrane Proteins); 0 (Galactosides); 0 (Glycoproteins); 0 (Immunoglobulin A, Secretory); 0 (Receptors, Immunologic); 31103-86-3 (Mannose)
Record Date Created: 19880607
Record Date Completed: 19880607

6/9/34
DIALOG(R)File 155:MEDLINE(R)

07748655 PMID: 3282732 Record Identifier: 056890; 00195020
Hemolytic-uremic syndrome associated with an infection by verotoxin producing Escherichia coli 0111 in a woman on oral contraceptives.
Stenger K O; Windler F; Karch H; von Wulffen H; Heesemann J
Department of Medicine, University Hospital Eppendorf, Hamburg, FRG.
Clinical nephrology (GERMANY, WEST) Mar 1988, 29 (3) p153-8, ISSN 0301-0430 Journal Code: 0364441
TJ: CLINICAL NEPHROLOGY.
Document type: Case Reports; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Other Citation Owner: PIP; POP
Abstract Source: PIP
Record type: Completed
Subfile: INDEX MEDICUS
A case of hemolytic-uremic syndrome (HUS) associated with an infection by a verotoxin-producing Escherichia coli (VTEC), serotype 0111:NM, in a 22-year-old woman who had been on oral contraceptives is presented. VTEC-associated cases of HUS infected by E. coli 0111 have been reported before, but never in adults. The kinetics of the humoral immune response to verotoxin in the patient is observed over three months and described for the first time. The possible role of contraceptives that have been

incriminated in the etiology of HUS before is discussed as well. Possible benefits of therapeutical interventions such as hemodialysis, therapeutic plasma exchange, converting enzyme inhibitors, or antibiotics still need clarification. However, it is strongly suggested to include tests for VTEC in the work-up of patients suffering from HUS.

Confirmation of a causal relationship between hemolytic-uremic syndrome (HUS) and verotoxin-producing Escherichia coli (VTEC) infection is provided by the case of a 22-year-old West German woman. The patient presented with fatigue, nausea, and headache. Ultrasonography revealed enlarged kidneys, and laboratory investigations showed uremia, hemolytic anemia, lactate dehydrogenase, haptoglobin below the detection limit, and thrombocytopenia. She received hemodialysis and drug treatment (heparin, dopamine, and furosemide). To investigate the kinetics of the humoral response to verotoxin, the patient was followed for 3 months. Fecal specimens on day 23 yielded E coli serotype 0111:NM, and stool filtrates on days 16 and 23 showed highly cytotoxic activity for HeLa cells. While the patient's initial serum showed a high **IgM** immune response against purified Shiga toxin, there was a steady decline in **IgM** and steady increase in **IgG** antibodies over the ensuing 3 months. These findings are suggestive of a recent infection by a verotoxin-producing organism. This is the 1st reported case of VTEC-associated HUS with e coli 0111 infection in an adult, and the patient's 4-year history of oral contraceptives (OCs)--ethinyl estradiol and chlormadinoneacetate--is considered to be of etiologic significance. The diminished antibody coating of bacteria in the urinary tract of OC users may have facilitated invasion of verotoxin across the mucosal barrier in this patient. Severe hypertension has been reported previously in OC users with HUS. It is speculated that verotoxin may trigger HUS in longterm OC users, initiating vasoconstriction and microangiopathic hemolysis.

Tags: Female; Human

Descriptors: *Bacterial Toxins--biosynthesis--BI; *Contraceptives, Oral, Synthetic--adverse effects--AE; *Escherichia coli--metabolism--ME; *Escherichia coli Infections--complications--CO; *Hemolytic-Uremic Syndrome --etiology--ET; Adult; Escherichia coli Infections--microbiology--MI; Hemolytic-Uremic Syndrome--metabolism--ME; Hemolytic-Uremic Syndrome --therapy--TH; **Shiga-Like Toxin I**

CAS Registry No.: 0 (Bacterial Toxins); 0 (Contraceptives, Oral, Synthetic); 0 (Shiga-Like Toxin I)

Identifiers: *Biology; *Case Studies; *Contraception; *Contraceptive Methods--side effects; *Demographic Factors; *Developed Countries; *Diseases; *Europe; *Family Planning; *Germany, Federal Republic Of; *Hematological Effects; *Hemic System; *Hypertension; *Infections; *Longterm Effects; *Oral Contraceptives, Combined--side effects; *Oral Contraceptives--side effects; *Physiology; *Population; *Population Dynamics; *Research Methodology; *Signs And Symptoms; *Studies; *Time Factors; *Vascular Diseases; *Western Europe

Record Date Created: 19880531

Record Date Completed: 19880531

6/9/37

DIALOG(R)File 155:MEDLINE(R)

07226542 PMID: 3529605

Development of intestinal antibodies against Escherichia coli antigens in piglets with experimental neonatal E. coli diarrhoea.

Olsson E; Smyth C J; Soderlind O; Svennerholm A M; Mollby R

Veterinary microbiology (NETHERLANDS) Jul 1986, 12 (2) p119-33, ISSN 0378-1135 Journal Code: 7705469

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Intestinal immune responses to Escherichia coli antigens were studied in conventionally reared piglets orally infected on the first day of life with a virulent enterotoxigenic E. coli (O149: K88). During the first week of life intestinal antibodies were produced against the homologous

lipopolysaccharide (LPS) as well as against the K88 antigen and the heat-labile enterotoxin (LT). On Day 7, anti-LPS antibodies of the **IgA** and **IgG** classes were detected in most piglets, whereas anti-K88 antibodies of the **IgG** and **IgM** classes predominated; antibodies against the enterotoxin were usually of the **IgG** class. In 21-day-old piglets antibodies of all immunoglobulin classes had usually been produced. In most cases, the levels of intestinal antibodies were substantially higher on Day 21 compared to Day 7, but the levels varied considerably both between and within litters. The intestinal immune responses did not correlate with the severity of clinical symptoms. One-, 7- and 21-day-old piglets reared in a specific-pathogen-free (SPF) herd lacked significant intestinal antibodies to the antigens examined. The oral challenge did not stimulate systemic immune responses. After colostral intake, all piglets had high antibody levels in the circulation. These levels decreased continuously during the 3-week study period. The possibility that high amounts of antibodies in colostrum could interfere with this early intestinal antibody formation should be considered when planning vaccination programmes against E. coli diarrhoea in piglets.

Tags: Support, Non-U.S. Gov't

Descriptors: Antibodies, Bacterial--biosynthesis--BI; *Antigens, Bacterial; *Diarrhea--veterinary--VE; *Escherichia coli--immunology--IM; *Escherichia coli Infections--veterinary--VE; * **Escherichia coli Proteins** ; *Fimbriae Proteins; *Intestines--immunology--IM; *Swine Diseases --immunology--IM; Animals; Animals, Newborn; Antigens, Surface--immunology --IM; Bacterial Toxins--immunology--IM; Diarrhea--immunology--IM; Enterotoxins--immunology--IM; Enzyme-Linked Immunosorbent Assay; Escherichia coli Infections--immunology--IM; Immunoglobulin A--biosynthesis --BI; Immunoglobulin G--biosynthesis--BI; Immunoglobulin M--biosynthesis --BI; Lipopolysaccharides--immunology--IM; Swine

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Antigens, Bacterial); 0 (Antigens, Surface); 0 (Bacterial Toxins); 0 (Enterotoxins); 0 (Escherichia coli Proteins); 0 (Immunoglobulin A); 0 (Immunoglobulin G) ; 0 (Immunoglobulin M); 0 (K88 antigen, E coli); 0 (Lipopolysaccharides); 0 (enterotoxin LT); 147680-16-8 (Fimbriae Proteins)

Record Date Created: 19860929

Record Date Completed: 19860929

6/9/39

DIALOG(R)File 155:MEDLINE(R)

07044883 PMID: 2419023

Intestinal and serum antibody response in gnotobiotic piglets to oral immunization with Escherichia coli.

Dziaba K A; Lambrecht G; Petzoldt K

Comparative immunology, microbiology and infectious diseases (ENGLAND) 1985, 8 (3-4) p267-72, ISSN 0147-9571 Journal Code: 7808924

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

The local and systemic immune response to a formolized E. coli oral vaccine was investigated in 13 gnotobiotic piglets. Beginning at ten days of age animals received a daily dose of 10(10) or 10(11) bacteria, on ten consecutive days. Intestinal loop tests with one animal of each group on day 26 showed protection which was more pronounced in the animal dosed 10(10) bacteria compared with the other immunized piglet. Immunoglobulin class-specific antibodies to O and K antigens were determined by ELISA technique. In serum no **IgG** or **IgA** antibodies were found, whereas **IgM** -anti O149 antibodies in both immunized groups reached their highest level at day 4 of dosing and decreased thereafter. **IgM** -anti K88 antibodies were first detected at day 10 of dosing. Both immunized groups had comparable serum levels at days 20 and 30. Also in gut secretion the **IgM** antibody response was predominant, and higher levels were found in the 10(10) group than in the 10(11) group. **IgG** and **IgA** antibody response were also detected in secretion.

Tags: Support, Non-U.S. Gov't
Descriptors: Antibodies, Bacterial--analysis--AN; *Bacterial Vaccines --immunology--IM; *Escherichia coli--immunology--IM; * **Escherichia coli Proteins** ; *Fimbriae Proteins; *Intestines--immunology--IM; Animals; Antigens, Bacterial--immunology--IM; Antigens, Surface--immunology--IM; Bacterial Vaccines--administration and dosage--AD; Dose-Response Relationship, Immunologic; Escherichia coli Vaccines; Germ-Free Life; Immunoglobulin M--immunology--IM; O Antigens; Swine; Vaccination --veterinary--VE
CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Antigens, Bacterial); 0 (Antigens, Surface); 0 (Bacterial Vaccines); 0 (Escherichia coli Proteins); 0 (Escherichia coli Vaccines); 0 (Immunoglobulin M); 0 (K88 antigen, E coli); 0 (O Antigens); 147680-16-8 (Fimbriae Proteins)
Record Date Created: 19860421
Record Date Completed: 19860421

6/9/41
DIALOG(R)File 155:MEDLINE(R)

06765684 PMID: 2579990
Enterotoxigenic Escherichia coli infections in newborn calves: a review.
Acres S D
Journal of dairy science (UNITED STATES) Jan 1985, 68 (1) p229-56, ISSN 0022-0302 Journal Code: 2985126R
Document type: Journal Article; Review
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Diarrhea caused by enterotoxigenic Escherichia coli is an infectious bacterial disease of calves that occurs during the first few days of life. The Escherichia coli that cause the disease possess special attributes of virulence that allow them to colonize the small intestine and produce an enterotoxin that causes hypersecretion of fluid into the intestinal lumen. These enterotoxigenic Escherichia coli are shed into the environment by infected animals in the herd and are ingested by newborn calves soon after birth. There is some natural immunity to enterotoxigenic Escherichia coli; however, it often fails to protect calves born and raised under modern husbandry conditions. Hence, methods have been developed to stimulate protective immunity by vaccination of the dam. The protective antibodies are **transferred passively** to calves through the colostrum. (152 Refs.)
Descriptors: Cattle Diseases; *Diarrhea--veterinary--VE; *Escherichia coli--pathogenicity--PY; *Escherichia coli Infections--veterinary--VE; * **Escherichia coli Proteins** ; Animals; Animals, Newborn; Antigens, Bacterial ; Antigens, Surface; Bacterial Outer Membrane Proteins; Bacterial Toxins --biosynthesis--BI; Bacterial Vaccines; Cattle; Cattle Diseases--diagnosis --DI; Cattle Diseases--etiology--ET; Cattle Diseases--immunology--IM; Colostrum--immunology--IM; Diarrhea--diagnosis--DI; Diarrhea--etiology--ET ; Diarrhea--immunology--IM; Enterotoxins--biosynthesis--BI; Escherichia coli--immunology--IM; Escherichia coli--ultrastructure--UL; Escherichia coli Infections--diagnosis--DI; Escherichia coli Infections--etiology--ET; Escherichia coli Infections--immunology--IM; Fimbriae, Bacterial --ultrastructure--UL; Immunity, Maternally-Acquired; Immunity, Natural; Intestine, Small--microbiology--MI; Microscopy, Electron; O Antigens; Vaccination--veterinary--VE; Virulence
CAS Registry No.: 0 (Antigens, Bacterial); 0 (Antigens, Surface); 0 (Bacterial Outer Membrane Proteins); 0 (Bacterial Toxins); 0 (Bacterial Vaccines); 0 (Enterotoxins); 0 (Escherichia coli Proteins); 0 (F41 antigen, E coli); 0 (K antigens); 0 (K99 antigen); 0 (O Antigens); 0 (enterotoxin LT); 0 (heat stable toxin (E coli))
Record Date Created: 19850426
Record Date Completed: 19850426

6/9/43
DIALOG(R)File 155:MEDLINE(R)

06606338 PMID: 6474799

The effect of oral immunization on the population of lymphocytes migrating to the mammary gland of the sow.

Kortbeek-Jacobs J M; van Kooten P J; van der Donk J A; van Dijk J E; Rutten V P

Veterinary microbiology (NETHERLANDS) Jul 1984, 9 (3) p287-99, ISSN 0378-1135 Journal Code: 7705469

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Sows were immunized orally with live Escherichia coli according to various immunization schedules. Six pregnant gilts were used; 4 immunized at various intervals during the last month of gestation, 1 control immunized after parturition following suppression of lactation by weaning and 1 non-immunized control. The effect of oral vaccination on cell populations from lymphoid organs was studied. The in vitro proliferative responses of the cell populations to K88 antigen, anti- **Ig** sera and mitogens were used to demonstrate the distribution of sensitized lymphocytes over different lymphoid organs. The capacity of these cells to produce antigen-specific **Ig** was determined by in ovo translation of their mRNA. Oral administration of antigen resulted in the appearance of K88-positive cells in lymphoid organs. In lactating sows, sensitized cells preferentially occurred in the mammary lymph nodes, whereas after suppression of lactation such a distribution was not seen. A possible route of migration of sensitized lymphocytes is discussed in relation to the local immune response. The antibody isotype produced by sensitized lymphocytes seemed to depend on the immunization schedule. The most effective schedule was one starting early in gestation and comprising frequent administration of antigen. This caused an optimal distribution of sensitized lymphocytes capable of **IgA** production.

Tags: Female; Pregnancy; Support, Non-U.S. Gov't

Descriptors: Antigens, Bacterial; * **Escherichia coli Proteins** ; *Fimbriae Proteins; *Immunization--veterinary--VE; *Lymphocytes--immunology--IM; *Mammary Glands, Animal--immunology--IM; *Swine--immunology--IM; Animals; Antigens, Surface--immunology--IM; Cell Movement; Immune Sera--immunology --IM; Immunization Schedule; Immunoglobulins--biosynthesis--BI; Lactation; Lymphocyte Activation; Mitogens--pharmacology--PD; Translation, Genetic

CAS Registry No.: 0 (Antigens, Bacterial); 0 (Antigens, Surface); 0 (Escherichia coli Proteins); 0 (Immune Sera); 0 (Immunoglobulins); 0 (K88 antigen, E coli); 0 (Mitogens); 147680-16-8 (Fimbriae Proteins)

Record Date Created: 19841025

Record Date Completed: 19841025

6/9/44

DIALOG(R)File 155:MEDLINE(R)

06186040 PMID: 6191616

Novel mucosal anti-microbial functions interfering with the plasmid-mediated virulence determinants of adherence and drug resistance.

Porter P; Linggood M A

Annals of the New York Academy of Sciences (UNITED STATES) Jun 30 1983, 409 p564-79, ISSN 0077-8923 Journal Code: 7506858

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Mucosal antibodies in vivo and in vitro interfere with the stability of plasmids coding for important virulence determinants in porcine enteropathogenic E. coli (EEC), such as the adhesion determinants K88ab and K88ac. The effector antibody is not directed against K88 antigens and is not serotype specific, but an antigen common to K88+ strains is implicated. Further lack of pathogen specificity is exemplified by antibody elimination of the more recently discovered K88ad plasmid. Antibodies that interfere

with K88 plasmids do not affect K99, which now appears as an alternative adhesion factor in porcine enteropathogenic E. coli. This plasmid can be eliminated, however, by antibodies having K99 specificity. In extending the studies to drug-resistance plasmids, further evidence has emerged that mucosal antibodies may assist in host control of the reservoir of R factors in the intestinal microflora. A major effector mechanism is that secretory **IgA** and **IgM** antibodies from orally immunized pigs can block the transfer of R factors between donor and recipient strains of E. coli.

Tags: Female

Descriptors: Antigens, Bacterial; *Antigens, Surface--immunology--IM; *Escherichia coli--pathogenicity--PY; * **Escherichia coli Proteins** ; *Fimbriae Proteins; *Intestinal Mucosa--immunology--IM; *Plasmids; Adhesiveness; Animals; Animals, Suckling; Bacterial Vaccines --administration and dosage--AD; Drug Resistance, Microbial; Epitopes --immunology--IM; Escherichia coli--immunology--IM; Escherichia coli --physiology--PH; Escherichia coli Infections--immunology--IM; Escherichia coli Infections--therapy--TH; Immunity, Maternally-Acquired; Neomycin --administration and dosage--AD; Streptomycin--administration and dosage --AD; Swine; Virulence

CAS Registry No.: 0 (Antigens, Bacterial); 0 (Antigens, Surface); 0 (Bacterial Vaccines); 0 (Epitopes); 0 (Escherichia coli Proteins); 0 (K88 antigen, E coli); 0 (Plasmids); 1404-04-2 (Neomycin); 147680-16-8 (Fimbriae Proteins); 57-92-1 (Streptomycin)

Record Date Created: 19830826

Record Date Completed: 19830826

?logoff hold

21jun04 16:20:40 User228206 Session D2185.9

$1.35 0.421 DialUnits File155

$3.99 19 Type(s) in Format 9

$3.99 19 Types

$5.34 Estimated cost File155

$0.24 TELNET

$5.58 Estimated cost this search

$5.58 Estimated total session cost 0.421 DialUnits

Status: Signed Off. (1 minutes)

07044883 PMID: 2419023

Intestinal and serum antibody response in gnotobiotic piglets to oral immunization with Escherichia coli.

Dziaba K A; Lambrecht G; Petzoldt K

Comparative immunology, microbiology and infectious diseases (ENGLAND) 1985, 8 (3-4) p267-72, ISSN 0147-9571 Journal Code: 7808924

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

The local and systemic immune response to a formolized E. coli oral vaccine was investigated in 13 gnotobiotic piglets. Beginning at ten days of age animals received a daily dose of 10(10) or 10(11) bacteria, on ten consecutive days. Intestinal loop tests with one animal of each group on day 26 showed protection which was more pronounced in the animal dosed 10(10) bacteria compared with the other immunized piglet. Immunoglobulin class-specific antibodies to O and K antigens were determined by ELISA technique. In serum no **IgG** or **IgA** antibodies were found, whereas **IgM** -anti O149 antibodies in both immunized groups reached their highest level at day 4 of dosing and decreased thereafter. **IgM** -anti K88 antibodies were first detected at day 10 of dosing. Both immunized groups had comparable serum levels at days 20 and 30. Also in gut secretion the **IgM** antibody response was predominant, and higher levels were found in the 10(10) group than in the 10(11) group. **IgG** and **IgA** antibody response were also detected in secretion.

Tags: Support, Non-U.S. Gov't

Descriptors: Antibodies, Bacterial--analysis--AN; *Bacterial Vaccines --immunology--IM; *Escherichia coli--immunology--IM; * **Escherichia coli Proteins** ; *Fimbriae Proteins; *Intestines--immunology--IM; Animals; Antigens, Bacterial--immunology--IM; Antigens, Surface--immunology--IM; Bacterial Vaccines--administration and dosage--AD; Dose-Response Relationship, Immunologic; Escherichia coli Vaccines; Germ-Free Life; Immunoglobulin M--immunology--IM; O Antigens; Swine; Vaccination --veterinary--VE

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Antigens, Bacterial); 0 (Antigens, Surface); 0 (Bacterial Vaccines); 0 (Escherichia coli Proteins); 0 (Escherichia coli Vaccines); 0 (Immunoglobulin M); 0 (K88 antigen, E coli); 0 (O Antigens); 147680-16-8 (Fimbriae Proteins)

Record Date Created: 19860421

Record Date Completed: 19860421

06606338 PMID: 6474799

The effect of oral immunization on the population of lymphocytes migrating to the mammary gland of the sow.

Kortbeek-Jacobs J M; van Kooten P J; van der Donk J A; van Dijk J E; Rutten V P

Veterinary microbiology (NETHERLANDS) Jul 1984, 9 (3) p287-99, ISSN 0378-1135 Journal Code: 7705469

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Sows were immunized orally with live Escherichia coli according to various immunization schedules. Six pregnant gilts were used; 4 immunized at various intervals during the last month of gestation, 1 control immunized after parturition following suppression of lactation by weaning and 1 non-immunized control. The effect of oral vaccination on cell populations from lymphoid organs was studied. The in vitro proliferative responses of the cell populations to K88 antigen, anti- **Ig** sera and mitogens were used to demonstrate the distribution of sensitized lymphocytes over different lymphoid organs. The capacity of these cells to produce antigen-specific **Ig** was determined by in ovo translation of their mRNA. Oral administration of antigen resulted in the appearance of K88-positive cells in lymphoid organs. In lactating sows, sensitized cells preferentially occurred in the mammary lymph nodes, whereas after suppression of lactation such a distribution was not seen. A possible route of migration of sensitized lymphocytes is discussed in relation to the local immune response. The antibody isotype produced by sensitized lymphocytes seemed to depend on the immunization schedule. The most effective schedule was one starting early in gestation and comprising frequent administration of antigen. This caused an optimal distribution of sensitized lymphocytes capable of **IgA** production.

Tags: Female; Pregnancy; Support, Non-U.S. Gov't

Descriptors: Antigens, Bacterial; * **Escherichia coli Proteins** ; *Fimbriae Proteins; *Immunization--veterinary--VE; *Lymphocytes--immunology--IM; *Mammary Glands, Animal--immunology--IM; *Swine--immunology--IM; Animals; Antigens, Surface--immunology--IM; Cell Movement; Immune Sera--immunology --IM; Immunization Schedule; Immunoglobulins--biosynthesis--BI; Lactation; Lymphocyte Activation; Mitogens--pharmacology--PD; Translation, Genetic

CAS Registry No.: 0 (Antigens, Bacterial); 0 (Antigens, Surface); 0 (Escherichia coli Proteins); 0 (Immune Sera); 0 (Immunoglobulins); 0 (K88 antigen, E coli); 0 (Mitogens); 147680-16-8 (Fimbriae Proteins)

Record Date Created: 19841025

Record Date Completed: 19841025

06765684 PMID: 2579990

Enterotoxigenic Escherichia coli infections in newborn calves: a review.

Acres S D

Journal of dairy science (UNITED STATES) Jan 1985, 68 (1) p229-56, ISSN 0022-0302 Journal Code: 2985126R

Document type: Journal Article; Review

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Diarrhea caused by enterotoxigenic Escherichia coli is an infectious bacterial disease of calves that occurs during the first few days of life. The Escherichia coli that cause the disease possess special attributes of virulence that allow them to colonize the small intestine and produce an enterotoxin that causes hypersecretion of fluid into the intestinal lumen. These enterotoxigenic Escherichia coli are shed into the environment by infected animals in the herd and are ingested by newborn calves soon after birth. There is some natural immunity to enterotoxigenic Escherichia coli; however, it often fails to protect calves born and raised under modern husbandry conditions. Hence, methods have been developed to stimulate protective immunity by vaccination of the dam. The protective antibodies are **transferred passively** to calves through the colostrum. (152 Refs.)

Descriptors: Cattle Diseases; *Diarrhea--veterinary--VE; *Escherichia coli--pathogenicity--PY; *Escherichia coli Infections--veterinary--VE; * **Escherichia coli Proteins** ; Animals; Animals, Newborn; Antigens, Bacterial ; Antigens, Surface; Bacterial Outer Membrane Proteins; Bacterial Toxins --biosynthesis--BI; Bacterial Vaccines; Cattle; Cattle Diseases--diagnosis --DI; Cattle Diseases--etiology--ET; Cattle Diseases--immunology--IM; Colostrum--immunology--IM; Diarrhea--diagnosis--DI; Diarrhea--etiology--ET ; Diarrhea--immunology--IM; Enterotoxins--biosynthesis--BI; Escherichia coli--immunology--IM; Escherichia coli--ultrastructure--UL; Escherichia coli Infections--diagnosis--DI; Escherichia coli Infections--etiology--ET; Escherichia coli Infections--immunology--IM; Fimbriae, Bacterial --ultrastructure--UL; Immunity, Maternally-Acquired; Immunity, Natural; Intestine, Small--microbiology--MI; Microscopy, Electron; O Antigens; Vaccination--veterinary--VE; Virulence

CAS Registry No.: 0 (Antigens, Bacterial); 0 (Antigens, Surface); 0 (Bacterial Outer Membrane Proteins); 0 (Bacterial Toxins); 0 (Bacterial Vaccines); 0 (Enterotoxins); 0 (Escherichia coli Proteins); 0 (F41 antigen, E coli); 0 (K antigens); 0 (K99 antigen); 0 (O Antigens); 0 (enterotoxin LT); 0 (heat stable toxin (E coli))

Record Date Created: 19850426

Record Date Completed: 19850426

06186040 PMID: 6191616

Novel mucosal anti-microbial functions interfering with the plasmid-mediated virulence determinants of adherence and drug resistance.

Porter P; Linggood M A

Annals of the New York Academy of Sciences (UNITED STATES) Jun 30 1983, 409 p564-79, ISSN 0077-8923 Journal Code: 7506858
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Mucosal antibodies in vivo and in vitro interfere with the stability of plasmids coding for important virulence determinants in porcine enteropathogenic E. coli (EEC), such as the adhesion determinants K88ab and K88ac. The effector antibody is not directed against K88 antigens and is not serotype specific, but an antigen common to K88+ strains is implicated. Further lack of pathogen specificity is exemplified by antibody elimination of the more recently discovered K88ad plasmid. Antibodies that interfere with K88 plasmids do not affect K99, which now appears as an alternative adhesion factor in porcine enteropathogenic E. coli. This plasmid can be eliminated, however, by antibodies having K99 specificity. In extending the studies to drug-resistance plasmids, further evidence has emerged that mucosal antibodies may assist in host control of the reservoir of R factors in the intestinal microflora. A major effector mechanism is that secretory **IgA** and **IgM** antibodies from orally immunized pigs can block the transfer of R factors between donor and recipient strains of E. coli.

Tags: Female
Descriptors: Antigens, Bacterial; *Antigens, Surface--immunology--IM; *Escherichia coli--pathogenicity--PY; * **Escherichia coli Proteins** ; *Fimbriae Proteins; *Intestinal Mucosa--immunology--IM; *Plasmids; Adhesiveness; Animals; Animals, Suckling; Bacterial Vaccines --administration and dosage--AD; Drug Resistance, Microbial; Epitopes --immunology--IM; Escherichia coli--immunology--IM; Escherichia coli --physiology--PH; Escherichia coli Infections--immunology--IM; Escherichia coli Infections--therapy--TH; Immunity, Maternally-Acquired; Neomycin --administration and dosage--AD; Streptomycin--administration and dosage --AD; Swine; Virulence
CAS Registry No.: 0 (Antigens, Bacterial); 0 (Antigens, Surface); 0 (Bacterial Vaccines); 0 (Epitopes); 0 (Escherichia coli Proteins); 0 (K88 antigen, E coli); 0 (Plasmids); 1404-04-2 (Neomycin); 147680-16-8 (Fimbriae Proteins); 57-92-1 (Streptomycin)
Record Date Created: 19830826
Record Date Completed: 19830826